

# R E P O R T

ON

# C L I N I C A L S U R G E R Y,

FOR WINTER SESSION 1874-75.

BY

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# REPORT

ON

## CLINICAL SURGERY.

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THE following report contains an analysis of the cases under Professor George Buchanan's care in the Western Infirmary, Glasgow, during the first winter session after the wards were opened.

The session began under unfavourable circumstances, in so far that the first clinical lecture was given with empty wards: The influx of patients, however, proved so great that in a short time the difficulty came to be to find beds for the numerous applicants; while, as the list of operations will show, the operating theatre was busily occupied.

Referring in the first place to the total cases, we find the number of females treated to be 40; males, 136=176 indoor. Of these, 3 females and 8 males died—6·2 per cent.—1 in 16. The fatal cases were as under:—

1. Mrs F., aged 32. Admitted Nov. 6, with cancer of rectum in an advanced stage. Patient had been sent into the Infirmary without previous notice, and, having been provided with a bed, she died before arrangements were completed for her return home.

2. A. W., age unknown. Picked up in street. Admitted Feb. 26, insensible. Unequal pupils; hemiplegia sinistra; stertor; small pulse. Died the same evening. On *post-mortem* examination, the right lateral ventricle of brain was found full of blood clot, and blood was effused in the sub-arachnoid space on the hemispheres.

3. Mrs B., aged 30. Hurt by a shaft in a mill, revolving 120 per minute. Admitted March 2, in a bruised condition. No bones fractured; pulse 100; small; breathing 24, quiet; pupils equal. Left side of scalp converted into a fluctuant bag, but no fracture of bone. Patient rallied, and seemed better next day; was sensible till shortly before death, which took place at 5 P.M. Examination of body revealed rupture of bowel at junction of middle and upper thirds of ileum. Peritonitis, which, in consequence of the generally contused state of the woman, had not revealed its presence by special signs.

4. P. F., aged 36. Admitted Nov. 18, with the whole of the left arm stripped of skin and subcutaneous fat down to the muscles, by phlegmonous erysipelas. Emaciated and feverish. Amputation at shoulder was performed, but patient proved unable to rally thoroughly, and died on the ninth day. The wound at the shoulder nearly healed.

5. F. S., aged 50. Struck by a plank falling on the head. Admitted Nov. 20, insensible. Pupils dilated; cornea not sensitive to touch; pulse 80, hard; steady bleeding from left ear. Died two and a half hours after admission. On *post-mortem* examination, a comminuted fracture of left temporal bone. The fracture extended to the foramen magnum. Contused state of brain at seat of fracture, and also at opposite side of brain, where no fracture of bone existed.

6. G. P., aged 73. Admitted Nov. 26, at 10.30 P.M. Hernia, reduced under chloroform; old standing bronchitis; weakness. Death eleven hours after admission from exhaustion.

7. A. A., aged 20. Admitted Dec. 1. False joint in great toe, resulting from an excision of the joint. Amputation was performed by Dr Foulis, and the wound healed fairly, but an exacerbation of latent phthisis carried patient off in a month.

8. J. K., aged 20. Fell from a scaffold 15 feet. Admitted Dec. 17, insensible. Pupils large, not reacting to light; pulse 48, compressible; breathing 32, laboured; every now and again a deep sigh; urine passed in bed, deeply tinged with blood. Patient never rallied; vomiting occurred; stertor ushered in death ten hours after admission.



9. D. M'K., aged 20. Fell from a scaffold 20 feet. Admitted March 2. Compound fracture of femur; pupils unequal; pulse 64, compressible; senses clear; arms and legs paralysed; a little sensory power in upper arms and shoulders; an intensely painful spot at 5th cervical spine; breathing 18, irregular, abdominal; micturition suspended; bowels not moved; vomiting afterwards occurred. Death on the 5th day after admission.

10. J. R., aged 45. Admitted March 20. Otitis of five months' standing. An exploratory examination under chloroform showed that nothing could be done. The state of patient got worse, and death took place a week after admission. At the *post-mortem* examination, the petrous bone was found perforated, and the whole internal ear a disorganised mass. The brain above and near the perforation was softened, and the base the seat of acute inflammation.

11. J. M., aged 57. Fell 30 feet on to some chains. Admitted April 3. Compound comminuted fracture of humerus; simple fracture femur; Pott's fracture; pupils unequal; senses clear; contusion on left side of forehead; great pain generally over body. Patient sank, and died 36 hours after admission.

It will be seen from the foregoing that some of the cases in the wards have been of great severity and interest.

Turning to the successful side of the picture, there have been 67 operations under chloroform, with two deaths (related above, cases 4 and 7). The average amount of chloroform given was  $1\frac{1}{2}$  oz. to each operation. The administration was conducted by the dressers in rotation, under the direction of the House Surgeon. The apparatus used was the ordinary helmet-shaped flannel mouthpiece. Esmarch's elastic band was used as a tourniquet, without the preliminary bandaging of the part, which was raised and gently shampooed for a little before applying the band. From January onwards the "catch" for the tourniquet (described in this *Journal*, January, 1875) was uniformly used, and found to facilitate the application of the band. Advantage has been taken of the proximity to the University to summon the

students for the cases which came in in the afternoon, and which could not wait. This was done in the case of strangulated femoral hernia, when a large number of students were enabled to witness an operation which they would otherwise have missed seeing.

There have been three cases of opened joints, all of which have ended in cure. The first of these, H. M'N, aged 22, admitted November 2, with a stab opening the wrist joint from behind, was treated with rest, fomentation, and cleanliness. Incisions were freely made from time to time to favour discharge; and on Jan. 17 patient was dismissed with the hand quite healed. The bones of the carpus at one time grated on each other to such a degree that amputation was almost decided on, but a continuance of the treatment resulted in a cure. In the second case, William R., aged 29, admitted Dec. 30, with intense inflammatory disturbance spreading up the arm, following on a prick with a pin on the little finger, antiseptic dressing was followed out, with the use of drainage tubes. Seven incisions, at various points in the palm and wrist, were made during the progress of the case. Here, too, the bones of the carpus grated freely, but in six weeks the patient was sent out with the wound quite healed. In the third case, P. H., aged 45, admitted March 5, with necrosis of end of middle metacarpal bone, resulting from a burn, the end of the affected bone was excised. The joint thus opened gave no trouble, and in three weeks the patient left the Hospital, with a small granulating surface at the seat of operation. The dressing in this case was lint soaked in 1·20 carbolic oil.

Three cases of cut-throat have been treated. M. W., aged 61, admitted Nov. 30, with transverse cut just above the thyroid cartilage, three inches long, and gaping widely. The finger could be laid upon the false cords. The two extremities of the wound were sewn up, the centre being left free. Patient was unable to swallow, but was fed twice a day by the stomach pump, passed by the mouth—the dressers taking the duty in rotation. Under this treatment



patient got rapidly well, and left January 28, with a small fistula at the site of the wound, having survived a sharp attack of erysipelas of the face, which occurred during the progress of the case. The second case, J. M., aged 38, admitted November 20, with transverse wound  $\frac{1}{2}$  inch below hyoid bone, and two inches long, opening into larynx. Under water dressing the wound healed kindly, and patient left on December 29.

The third, J. C., aged 38, admitted April 13. Cut extended from an inch and a half below the left ear, to two inches on the right side of the median line. The two extremities of the wound were drawn together by sutures, but the central part was left open. Patient dismissed well on the 30th April.

An interesting case of cicatricial contraction of the mouth is still under treatment. E. G., aged 13. Admitted March 29. The history is very obscure; but on admission the inner margins of the lips were found drawn together by a circular scar, which left a round opening just sufficient to admit the point of the finger. The scar was closely adherent to the gums. Lateral incisions were made, and two hooks, coated with guttapercha, and connected by an elastic band passing behind the head, were used to drag asunder the angles of the mouth.

The two lithotomy cases noted in the operation list deserve notice. In the first, J. C., aged 72, admitted Dec. 10, 1874, with recurrence of stone after lithotomy, Dec. 3, 1873, a round phosphatic stone was removed by the rectangular method. Slight oozing occurred after the operation, necessitating plugging; recovery took place, patient leaving two months after with the wound closed.

The second case, J. G., aged 57, admitted February 2, is rendered interesting by the history of the formation of the stone. Two-and-a-half years before admission painless hæmorrhage from bladder occurred, and had recurred at intervals after. Around two of the clots left in the bladder a deposit of uric acid had taken place, and the successive recurrences of the hæmorrhage had tended to coat the forming stones

with flocculent soft matter, thus mitigating symptoms, and by means of the flocculi soliciting further deposit. The uric acid is disposed accordingly in loose layers, with minute interspaces, round a half-dried clot, as shown on section. The stones are facettèd. The weight is 2 oz. The symptoms of stone were only recently developed, since December, 1874. The operation by rectangular staff was followed by oozing, checked by plugging, and subcutaneous injection of ergotin (5 m.) ; and recovery took place, only interrupted by recurrence of oozing at 6th day : checked as before. Patient left March 23, quite well.

There were nine major amputations, six of these being of the thigh. Among these there was only one death, that of the man admitted with phlegmonous erysipelas and sloughing of the whole arm, necessitating, as a measure of relief, amputation at the shoulder.

Among the ulcers, there was one which attracted attention, from the great increase in the length and thickness of the tibia and fibula caused by it. F. H., aged 14. Admitted Dec. 1, with an ulcer 6 inches long by 4 inches broad on the front of left leg, of 5 years' duration. The left leg measured, from lower edge of patella to internal malleolus,  $1\frac{1}{2}$  inches more than the right, and the limb was thickened in proportion. The femora were equal in length and size. Under treatment the ulcer diminished gradually to about the size of a crown piece, when progress, which had been slow of late, ceased. Skin grafting was resorted to, and the grafts, 12 in number, all took. The ulcer seemed to be healing for a fortnight after, but again the edges ceased to grow, and the ulcer enlarged. The cicatrisation had to proceed over an oblong mound of bone, over which the new skin was stretched, tense and shining. It was evident that this must be removed ; and on April 6, a crucial incision having been made, the flaps with the periosteum were dissected back, and the oblong mound of bone removed with a Graham's saw. It measured 4 inches long by  $1\frac{1}{2}$  inches broad and  $\frac{1}{2}$  inch thick, a localised growth, and



evidently due to the irritation of the ulcer. Healthy granulations have sprung up over the surface of the excised portion of bone and cicatrisation is advancing rapidly.

The out-patients applying for advice in the ward have been 37 in number. There have been the usual amputations of fingers; the only point to notice in these has been the rigid observance of the rule never to remove a particle of any finger in a working man when it could possibly be avoided. In some cases the torn fragments of skin have been simply brought together over the end of the bone, and useful joints have thus been saved to the patients. The first phalanx was invariably left, and even when part of the first phalanx was removed, the stump was left. The results have been quite satisfactory.

TABLE OF OPERATIONS BY PROFESSOR GEORGE BUCHANAN,  
FROM 1ST NOVEMBER, 1874, TILL 1ST MAY, 1875.

		<i>One Amputation at Shoulder.</i>			
		Phlegmon and gangrene of arm -	Flap from deltoid -	Death -	Exhaustion.
Nov. 20, 1874	P. F. aged 36				
<i>Four Amputations of Fingers.</i>					
All successful.					
<i>Six Amputations of Thigh.</i>					
Dec. 3, 1874	J. B. aged 23	Smash of leg -	-	Carden's amput. through condyles, secondary.	Successful -
Feb. 24, 1875	C. G. " 29	Old ulceration and distortion of leg -	-	Carden's amput. at knee	" -
Mar. 3, " 36	M. W. " 36	Disease of knee joint -	-	" "	" -
" 3, " 48	C. F. " 48	" " -	-	" "	" -
" 4, " 38	G. S. " 38	Cancer of end of femur -	-	Amput. at middle of thigh	" -
Apr. 23, " 25	J. M <sup>c</sup> K. " 25	Disease of knee -	-	Carden's amput. -	" -
<i>Two Amputations at Ankle.</i>					
Jan. 30, 1875	J. P. aged 16	Caries of tarsus -	-	Syme's, at ankle -	Successful -
Feb. 24, " 13	J. S. " 13	" " -	-	" " -	" -
<i>One Amputation of Great Toe.</i>					
Dec. 1, 1874	A. A. aged 20	False joint after excision -	-	Amputation -	Death - { A month after from acute phthisis.
<i>Four Excisions of Joints.</i>					
Feb. 3, 1875	S. D. aged 3	Disease of elbow -	-	Excision of elbow -	Successful -
Mar. 10, " 14	H. C. " 14	" " -	-	" " -	" -
" 29, " 17	A. M <sup>c</sup> C. " 17	" wrist -	-	" wrist -	" -
" 24, " 40	W. S. " 40	Old dislocation of, and fracture near elbow -	-	" elbow -	" -

*Ten Excisions of Bone.*

Nov. 7, 1874	D. M.C.	aged 25	Necrosis of humerus	-	-	Sequestrum removed	-	Improved
Dec. 5, " 25	J. D.	" 25	" "	-	-	" "	-	Successful
Feb. 20, 1875	J. G.	" 8	" os calcis	-	-	" "	-	"
Mar. 10, " 45	P. H.	" 45	Burn of knuckle	-	-	Excision of end of metatarsal bone	-	"
" 13, " 22	H. M.E.	" 22	Ulcer over os calcis	-	-	Excision of os calcis	-	Improved
" 17, " 24	O. M.K.	" 24	Ulcers on tibia	-	-	Gouged surface of tibia	-	"
" 31, " 12	M. D.	" 12	Superficial necrosis of fibula	-	-	Removal of necrosed scales of bone	-	Successful
" 31, " 9	J. F.	" 9	" " tibia	-	-	" "	-	"
Apr. 6, " 14	T. H.	" 14	Exostosis on tibia	-	-	Excision	-	-
" 13, " 7	W. M.	" 7	Necrosis of tibia	-	-	" "	-	Successful

*Three Excisions of Mamma.*

Nov. 6, 1874	Mrs R.	aged 40	Fungating acute scirrhus	-	-	Excision of mamma	-	Successful
Jan. 17, 1875	J. F.	" 40	Scirrhus of mamma	-	-	" "	-	"
Feb. 19, " 55	J. J.	" 55	" "	-	-	" "	-	"

*Lithotomy—Two Cases.*

Dec. 16, 1874	J. C.	aged 72	Stone in bladder	-	-	Rectangular	-	Successful
Feb. 13, 1875	J. G.	" 57	" "	-	-	" "	-	"

*One Hernia.*

Mar. 10, 1875	M. J.	aged 43	Strang. fem. hernia	-	-	Opening Sac	-	Successful
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*One Ligature of Artery.*

Apr. 1, 1875	D. M.C.	aged 14	Lacerated wound of radial	-	-	Tied above and below	-	Successful
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*Tenotomy—Five Cases.*

Dec. 11, 1874	H. M.	aged 5	Talipes varus	-	-	Tenotomy	-	Successful
Jan. 27, 1875	A. B.	" 9	" equinus	-	-	" "	-	"
Feb. 27, " 7	J. K.	" 7	" varus	-	-	" "	-	"
Apr. 19, " 4	C. B.	" 4	" "	-	-	" "	-	"
" 13, " 7	W. M.	" 7	" equinus	-	-	" "	-	"

*Six Fistulae.*

All cured by incision.



